

**AMENDMENTS TO THE CLAIMS:**

**Please amend the claims as follows:**

1. (Previously Presented) A descriptor propagation system comprising:  
  
an image acceptance device that receives an image having a plurality of descriptors  
and a plurality of image regions;  
  
a descriptor acceptance device that accepts said plurality of descriptors, which are  
associated with a first content granularity;  
  
an image processing device that processes the image and recognizes a correspondence  
between said plurality of descriptors and said plurality of image regions, said image regions  
defining a second content granularity; and  
  
a descriptor propagation device that propagates said plurality of descriptors to the  
second content granularity that is finer than the first content granularity, and wherein the  
descriptor propagation device propagates the first descriptor without prior data regarding the  
first descriptor at the second granularity and without manual user intervention.
2. (Previously Presented) The system of claim 1, further comprising:  
  
wherein the descriptor propagation device generates a propagation function based upon  
said plurality of descriptors and the first content granularity, and  
  
wherein the descriptor propagation device propagates said plurality of descriptors  
based upon the propagation function and said plurality of descriptors.
3. (Previously Presented) The system of claim 1, further comprising:

a repository that stores said plurality of descriptors associated with the first content granularity.

4. (Previously Presented) A descriptor mapping system, comprising:

an image acceptance device that receives an image having a plurality of descriptors and a plurality of image regions;

a descriptor acceptance device that accepts said plurality of descriptors, which are associated with a first content granularity;

an information repository that stores a mapping function;

an image processing device that processes the image and recognizes a correspondence between said plurality of descriptors and said plurality of image regions, said image regions defining a second content granularity; and

a descriptor propagation device that propagates said plurality of descriptors to the second content granularity that is finer than the first content granularity, and wherein the descriptor propagation device propagates the first descriptor without prior data regarding the first descriptor at the second granularity and without manual user intervention.

5. (Canceled)

6. (Original) The system of claim 4, further comprising:

a descriptor mapping device that generates another mapping function based upon said plurality of descriptors and the first content granularity, and that stores the second mapping function in the information repository.

7. (Previously Presented) The system of claim 4, further comprising:  
a repository that stores said plurality of descriptors associated with a first content granularity.
8. (Previously Presented) A descriptor classification system, comprising:  
a descriptor acceptance device that accepts a first content that includes a plurality of descriptors at a first content granularity, the content including a plurality of regions;  
a content processing device that processes the content and recognizes a correspondence between said plurality of descriptors and said plurality of regions, said regions defining a second content granularity; and  
a descriptor propagation device that propagates content that includes the plurality of descriptors to a second content granularity,  
wherein the second content granularity is finer than the first content granularity, and  
wherein the descriptor propagation device propagates the content without prior data regarding the content at the second content granularity and without manual user intervention.
9. (Previously Presented) The system of claim 8, further comprising:  
a descriptor classification device that generates a classification function based upon the first content, and  
wherein the descriptor propagation device propagates the content based upon the classification function and the first content at the first content granularity.

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10. (Currently Amended) A method for propagating descriptors, the method being implemented on a computer including a processor, comprising:

analyzing, using the processor, a first content at a first content granularity to determine a propagation function that correlates a first descriptor provided for the first content to a second content granularity that is finer than the first content granularity; and  
propagating the first descriptor to the second content granularity without prior data regarding the first descriptor at the second content granularity.

11. (Original) The method of claim 10, wherein analyzing the first content to determine the propagation function comprises extracting features from the first content.

12. (Currently Amended) A method for mapping descriptors, the method being implemented on a computer comprising:

an image acceptance device that receives an image having a plurality of descriptors and a plurality of image regions; and

an image processing device that processes the image and recognizes a correspondence between said plurality of descriptors and said plurality of image regions, said image regions defining a second content granularity;

the method comprising:

mapping said plurality of descriptors at a first content granularity to the second content granularity that is finer than the first content granularity based upon a mapping function; and

propagating said plurality of descriptors to the second content granularity

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without prior data regarding said plurality of descriptors at the second content granularity and without manual user intervention.

13. (Original) The method of claim 12, wherein the mapping function is stored in an information repository.

14. (Canceled)

15. (Previously Presented) The method of claim 12, further comprising analyzing said plurality of descriptors to generate another mapping function.

16. (Currently Amended) A method for classifying descriptors, the method being implemented on a computer comprising:

an image acceptance device that receives an image having a plurality of descriptors and a plurality of image regions; and

an image processing device that processes the image and recognizes a correspondence between said plurality of descriptors and said plurality of image regions, said image regions defining a second content granularity;

the method comprising:

generating a classification function based upon a first descriptor for a first content at a first content granularity;

accepting [[a]] the second content granularity that does not include a descriptor;

and

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propagating the first descriptor to the second content granularity that is finer than the first content granularity based upon the classification function without prior data regarding the first descriptor at the second content granularity.

17. (Currently Amended) A computer-readable medium tangibly embodying a program of computer-readable instructions executable by a digital processing apparatus to perform a method of propagating descriptors, comprising:

receiving an image having a plurality of descriptors and a plurality of image regions;  
instructions for processing the image and recognizing a correspondence between said plurality of descriptors and said plurality of image regions, said image regions defining a second content granularity;

instructions for generating a classification function based upon a first descriptor for a first content at a first content granularity;

instructions for accepting a second content that does not include a descriptor; and

instructions for propagating the first descriptor to the second content at [[a]] the second content granularity that is finer than the first content granularity based upon the classification function without prior data regarding the first descriptor at the second content granularity.

18. (Currently Amended) A computer-readable medium tangibly embodying a program of computer-readable instructions executable by a digital processing apparatus to perform a method of mapping descriptors, comprising:

receiving an image having a plurality of descriptors and a plurality of image regions;

instructions for processing the image and recognizing a correspondence between said

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plurality of descriptors and said plurality of image regions, said image regions defining a second content granularity;

instructions for mapping a first descriptor at a first content granularity to a second content granularity that is finer than the first content granularity based upon a mapping function; and

instructions for propagating the first descriptor to the second content granularity without prior data regarding the first descriptor at the second content granularity.

19. (Original) The medium of claim 18, wherein the second descriptor is different than the first descriptor and is stored in an information repository.

20. (Currently Amended) A computer-readable medium tangibly embodying a program of computer-readable instructions executable by a digital processing apparatus to perform a method of classifying descriptors, comprising:

receiving an image having a plurality of descriptors and a plurality of image regions;  
instructions for processing the image and recognizing a correspondence between said plurality of descriptors and said plurality of image regions, said image regions defining a second content granularity;

instructions for generating a classification function based upon a first descriptor for a first content at a first content granularity;

instructions for accepting a second content that does not include a descriptor; and

instructions for propagating the first descriptor to the second content at ~~[[a]]~~ the second content granularity that is finer than the first content granularity based upon the classification

function without data regarding the first descriptor at the second content granularity.

21. (Previously Presented) A method of deploying computing infrastructure in which computer-readable code, stored on a computer-readable medium, is integrated into a computing system, such that said code and said computing system combine to perform a method for propagating descriptors, said method comprising:

analyzing a first content at a first content granularity to determine a propagation function that correlates a first descriptor provided for the first content to a second content granularity that is finer than the first content granularity; and

propagating the first descriptor to the second content granularity without prior data regarding the first descriptor at the second content granularity.

22. (Currently Amended) A method of deploying computing infrastructure in which computer-readable code, stored on a computer-readable medium, is integrated into a computing system, such that said code and said computing system combine to perform a method for mapping descriptors, said method comprising:

receiving an image having a plurality of descriptors and a plurality of image regions;  
processing the image and recognizing a correspondence between said plurality of  
descriptors and said plurality of image regions, said image regions defining a second content  
granularity;

mapping a first descriptor at a first content granularity to ~~[[a]]~~ the second content granularity that is finer than the first content granularity based upon a mapping function; and

propagating the first descriptor to the second content granularity without prior data



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regarding the first descriptor at the second content granularity.

23. (Currently Amended) A method of deploying computing infrastructure in which computer-readable code, stored on a computer-readable medium, is integrated into a computing system, such that said code and said computing system combine to perform a method for classifying descriptors, said method comprising:

receiving an image having a plurality of descriptors and a plurality of image regions;  
processing the image and recognizing a correspondence between said plurality of  
descriptors and said plurality of image regions, said image regions defining a second content  
granularity;

generating a classification function based upon a first descriptor for a first content at a first content granularity;

accepting a second content that does not include a descriptor; and

propagating the first descriptor to the second content at a second content granularity that is finer than the first content granularity based upon the classification function without prior data regarding the first descriptor at the second content granularity.

24. (Canceled)

25. (Canceled)